

# FILE NOTATIONS

Entered in NID File \_\_\_\_\_ ✓

Entered On S R Sheet \_\_\_\_\_

Location Map Pinned \_\_\_\_\_ ✓

Card Indexed \_\_\_\_\_ ✓

I W R for State or Fee Land \_\_\_\_\_

Checked by Chief \_\_\_\_\_ *PMB*

Copy NID to Field Office \_\_\_\_\_ ✓

Approval Letter \_\_\_\_\_ ✓

Disapproval Letter \_\_\_\_\_

## COMPLETION DATA:

Date Well Completed *11-16-64*

OW \_\_\_\_\_ WW \_\_\_\_\_ TA \_\_\_\_\_

GW \_\_\_\_\_ OS \_\_\_\_\_ PA \_\_\_\_\_

Location Inspected \_\_\_\_\_

Bond released \_\_\_\_\_

State of Fee Land \_\_\_\_\_

## LOGS FILED

Driller's Log *1-18-64*

Electronic Logs (No. ) *2*

E \_\_\_\_\_ I \_\_\_\_\_ E-I \_\_\_\_\_ ✓ GR \_\_\_\_\_ GR-N \_\_\_\_\_ Micro \_\_\_\_\_

Lat \_\_\_\_\_ Mi-L \_\_\_\_\_ Sonic *gr* ✓ Others \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐OTHER ☐SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

ZOLLER AND DANNERBERG

## 3. ADDRESS OF OPERATOR

219 Patterson Building, Denver, Colo.

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

660 feet south of the north, 660 feet west of the east

At proposed prod. zone

Desert Creek

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

6-1/2 miles northeast of Aneth School

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. line, if any)

660 feet

## 16. NO. OF ACRES IN LEASE

2360

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

6150

17. NO. OF PLACES ASSIGNED  
TO THIS WELL

80

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4853 Ground

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
17-1/2"	13-3/8ths	32#	150 feet
11"	8-3/8ths	24#	1500 feet

7-7/8ths inch hole to total depth

All shows of oil and gas will be properly tested

Hydraulic blow-out-preventers will be in operation

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and the vertical depth of the blowout preventer program, if any.

## 24.

ZOLLER AND DANNERBERG

SIGNED

TITLE

Partner

DATE

October 1, 1964

(This space for Federal or State office use)

PERMIT NO.

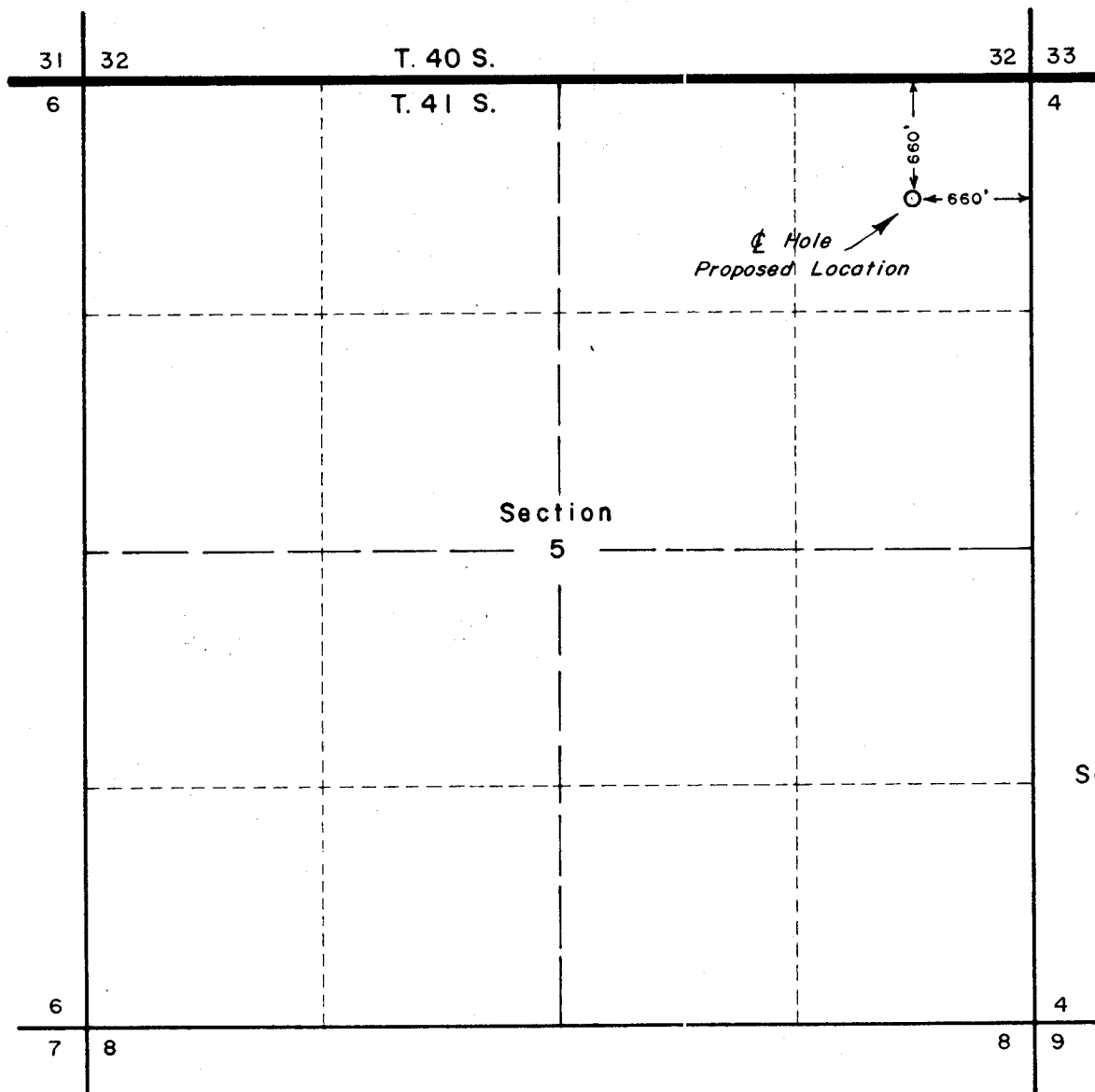
APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side



# **WELL LOCATION: Zoller & Danneberg - #1 South Ismay**

Located 660 feet South of the North line and 660 feet West of the East line of Section 5,  
 Township 41 South, Range 26 East, Salt Lake Base & Meridian.  
 San Juan Co., Utah  
 Existing ground elevation determined at 4787 feet based on adjoining well locations.

I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief.

*Frederick H. Reed*

FREDERICK H. REED  
 Registered Land Surveyor  
 State of Utah # 2689



ZOLLER & DANNEBERG  
 Denver, Colorado

**WELL LOCATION**  
 Section 5 - T. 41 S. - R. 26 E.  
 San Juan Co., Utah

CLARK - REED & ASSOC.  
 Durango, Colorado

DATE: Sept. 24, 1964  
 FILE NO: 64066

13

September 29, 1964

Zeller and Danneberg  
219 Patterson Building  
Denver, Colorado

Re: Notice of Intention to Drill Well No.  
SOUTH ISMAY #1, 660' FNL & 660' FEL  
of Sec. 5, T. 41 S., R. 26 E., San  
Juan County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted.

As soon as you have determined that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL, Chief Petroleum Engineer  
Office: DA 8-5771 or DA 8-5772 or DA 8-5773  
Home: CR 7-2890 - Salt Lake City, Utah

This approval terminates within 90 days if this well has not been spudded within said period.

Enclosed please find Form OGCC-8-X, which is to be completed if water sands (aquifers) are encountered while drilling, particularly assessable near surface water sands. Your cooperation with respect to completing this form will be greatly appreciated.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT  
EXECUTIVE DIRECTOR

CBF:enp

cc: P. T. McQuath, District Engineer  
U. S. Geological Survey, Farmington, New Mexico  
H. L. Coonts, Petroleum Engineer  
Oil & Gas Conservation Commission, Moab, Utah

January 13, 1965

Zoller and Danneberg  
219 Patterson Building  
Denver, Colorado

Re: Well No. South Ismay #1,  
Sec. 5, T. 41 S., R. 26 E.,  
San Juan County, Utah.

Gentlemen:

Our records indicate that you have not filed a Monthly Report of Operations for the months of October and November, 1964, for the subject well. Rule C-22(1), General Rules and Regulations and Rules of Practice and Procedure, Utah State Oil and Gas Conservation Commission, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGCC-1b, (U. S. Geological Survey Form 9-331, "Sundry Notices and Reports on Wells"), or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your immediate attention is required in this matter.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

KATHY G. WARNER  
RECORDS CLERK

KGW:sch

Encl: Forms

9

March 23, 1965

Zoller & Danneberg  
219 Patterson Building  
Denver, Colorado

Re: Well No. South Ismay #1,  
Sec. 5, T. 41 S., R. 26 E.,  
San Juan County, Utah.

Gentlemen:

This letter is to advise you that the "Well Completion or Recompletion Report and Log" for the above mentioned well is due and has not been filed with this Commission as required by our rules and regulations.

Please complete the enclosed Forms OGCC-3, "Well Completion or Re-completion Report and Log", in duplicate and forward them to this office and soon as possible.

Thank you for your cooperation in this request.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

KATHY G. WARNER  
RECORDS CLERK

kgw

Enclosure: Forms

64

Cause 109-1

Kimberly Exploration #1

McElmo Mesa Field

Perforated 5540'-45'

Porosity: From Sonic ( $48 \mu\text{sec}$ ) = 3% (?)

Water 90,000 ppm

$R_w = .05$

$RT = 42$  from log

From Texas Energy Development report  
2009  
7000

Porosity from Ismay avg 9%  $F = 200$

$$S = \frac{\sqrt{(F)(.05)}}{42} = \sqrt{\frac{10}{42}} = \sqrt{.24} = .49$$

$S_w = 49\%$   $S_o = 51\%$

8

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF UTAH

IN THE MATTER OF THE AREAL EXTENSION OF THE COMMISSION'S ORDER OF DECEMBER 9, 1957, FOR THE ISMAY POOL, SAN JUAN COUNTY, UTAH, WITH REFERENCE TO THE KNOWN PRODUCING ZONES OF THE HERMOSA FORMATION. : CAUSE NO. 109-1  
: AMENDED NOTICE OF HEARING

THE STATE OF UTAH TO ALL OPERATORS, TAKERS OF PRODUCTION, MINERAL AND ROYALTY OWNERS AND OTHER PERSONS IN THE STATE OF UTAH, AND PARTICULARLY ALL PERSONS INTERESTED IN THE ISMAY FIELD, SAN JUAN COUNTY, UTAH:

Notice is hereby given that the Oil and Gas Conservation Commission of the State of Utah will conduct a hearing in its office, 340 East South Temple - Suite 301, Salt Lake City, Utah, on Thursday, March 11, 1965 at ten o'clock A.M., on the application of the Kimbark Exploration Company, in the above entitled cause at which time all persons, firms, and corporations may, if they so desire, appear and be heard.

Notice is further given that the purpose of said hearing is to determine whether the Commission should enter its order:

1. directing that the Commission's order of December 9, 1957, in Cause No. 9, and the Commission's order of May 9, 1961, in Cause No. 54, be extended to include the following described lands, which are believed to contain, in the known producing zones of the Hermosa Formation, accumulations of oil and gas which are common to the initially spaced area of the "Ismay Pool":

Township 41 South, Range 26 East, SLBM

Section 4: W $\frac{1}{2}$   
Section 5: All  
Section 6: All

2. establishing 80-acre drilling units and permitted well locations for such additional lands

3. making such additional lands in all things subject to the provisions of the December 9, 1957, and May 9, 1961, orders.

DATED this 25th day of January, 1965.

STATE OF UTAH

OIL AND GAS CONSERVATION COMMISSION

*Cleon B. Feight*  
CLEON B. FEIGHT  
EXECUTIVE DIRECTOR & SECRETARY



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. <b>14-20-603-708</b>	
b. TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. PERM. <input type="checkbox"/> Other <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>Navajo</b>	
2. NAME OF OPERATOR <b>Zeller &amp; Danneberg &amp; Kimbark Exploration Company</b>		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR <b>Kimbark 201 University Blvd. Denver 8, Colorado</b>		FARM OR LEASE NAME <b>So. Inlay</b>	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface <b>NE NE</b> At top prod. interval reported below <b>NE NE</b> At total depth <b>NE NE</b>		9. WELL NO. <b>1</b>	
14. PERMIT NO.		DATE ISSUED	
15. DATE SPUDDED <b>10/4/64</b>		16. DATE T.D. REACHED <b>10/25/64</b>	
17. DATE COMPL. (Ready to prod.) <b>11/16/64</b>		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <b>4787' 4790' 4797'</b>	
19. ELEV. CASINGHEAD <b>4787</b>		20. TOTAL DEPTH, MD & TVD <b>5543</b>	
21. PLUG, BACK T.D., MD & TVD <b>5549</b>		22. IF MULTIPLE COMPL. HOW MANY*	
23. INTERVALS DRILLED BY <b>0-552</b>		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* <b>5540-5545 Peris. Lower Inlay</b>	
25. TYPE ELECTRIC AND OTHER LOGS RUN <b>IES—GR. S. C.</b>		26. WAS DIRECTIONAL SURVEY MADE <b>No</b>	
27. WAS WELL CORDED <b>No</b>		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. PERFORATION RECORD (Interval, size and number) <b>5540-5545 with 20 MCF II Kone Shots</b>		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) <b>5540-45</b> AMOUNT AND KIND OF MATERIAL USED <b>500 gals.</b>	
33. PRODUCTION		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) <b>Fuel for treator</b>	
35. LIST OF ATTACHMENTS		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records <b>Zeller &amp; Danneberg Kimbark Exploration Co.—Agent</b> SIGNED <b>[Signature]</b> TITLE <b>President</b> DATE <b>Nov. 20, 1964</b>	

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements (consult local State or Federal office for specific instructions).

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORDED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION TEST, TIME TOOL, OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION CONTENTS, ETC.
Lower Ismay	5537		<p>11' porous Limestones</p> <p>ENT #1 5537-5553 Open 43" 675 INCHES.</p> <p>OTS 33". Clean oil 35". Pulled pipe</p> <p>2nd sound 2040' fluid-Reversed out-head</p> <p>120' oil and 30' str. above reverse sub.-</p> <p>180' below sub.</p> <p>151P 1 hr. 22068</p> <p>FS1P 1 hr. 21768</p> <p>FP 623-12478</p> <p>ENT 1360</p> <p>Water-90,000 PPM</p>
			<p>NAME</p> <p>Chinle</p> <p>Shinarump</p> <p>Moenkopi</p> <p>DeChelly</p> <p>Orgen Rock</p> <p>Mesa</p> <p>Upper Ismay</p> <p>Lower Ismay</p> <p>TD</p>
			<p>MEAS. DEPTH</p> <p>1820</p> <p>2422</p> <p>2696</p> <p>2718</p> <p>2810</p> <p>4536</p> <p>5434</p> <p>5537</p> <p>5847</p>
			<p>TRUE VERT. DEPTH</p> <p>Same</p>

JAN 18 1965

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE \_\_\_\_\_  
TRIBE Navajo  
LEASE NO. 14-20-503-708

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County San Juan Field Isaay

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 19 64,

Agent's address Kimbark Exploration Co. Company Zoller & Danneberg  
201 University Blvd. Denver 6, Colo. Signed [Signature]

Phone DU 84021 Agent's title President

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NE NE 5		41S 26E 1	1	0						Drilling

NOTE.—There were no runs or sales of oil; no M. cu. ft. of gas sold;  
no runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____						5. LEASE DESIGNATION AND SERIAL NO. <b>14-20-603-708</b>	
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____						6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>Navajo</b>	
2. NAME OF OPERATOR <b>Zoller &amp; Danneberg AGENT-Kimbark Exploration Company</b>						7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR <b>201 University Blvd. Denver 6, Colorado - Kimbark Expl. Co.</b>						8. FARM OR LEASE NAME <b>So. Ismay</b>	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface <b>NE NE</b> At top prod. interval reported below <b>NE NE</b> At total depth <b>NE NE</b>						9. WELL NO. <b>1</b>	
14. PERMIT NO.				DATE ISSUED		10. FIELD AND POOL, OR WILDCAT <b>WC</b>	
15. DATE SPUDDED <b>10/4/64</b>						11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA <b>Sec. 5 T41S R26E</b>	
16. DATE T.D. REACHED <b>10/25/64</b>		17. DATE COMPL. (Ready to prod.) <b>11/16/64</b>		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <b>4787 GL 4799 KB</b>		12. COUNTY OR PARISH <b>San Juan</b>	
19. ELEV. CASINGHEAD <b>4787</b>		20. TOTAL DEPTH, MD & TVD <b>5553</b>		21. PLUG, BACK T.D., MD & TVD <b>5549</b>		22. IF MULTIPLE COMPL., HOW MANY*	
23. INTERVALS DRILLED BY						24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVI)* <b>5540-5545 Perfs. Lower Ismay</b>	
25. WAS WELL CORED <b>No</b>						26. TYPE ELECTRIC AND OTHER LOGS RUN <b>IES-GR. S. C.</b>	
27. WAS WELL CORED <b>No</b>							
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
13 3/8"	48	153	17 1/2"	150		0	
8 5/8"	24	1422	11"	100		0	
5 1/2"	15.5#	5552	7"	100		0	
29. LINER RECORD							
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD		
					SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2"	5460	5460
31. PERFORATION RECORD (Interval, size and number) <b>5540-5545 with 20 NCF II Kone Shots</b>				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED			
5540-5545				500 gals.			
33.* PRODUCTION							
DATE FIRST PRODUCTION <b>11/13/64</b>		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) <b>Flowing</b>				WELL STATUS (Producing or shut-in) <b>Prod.</b>	
DATE OF TEST <b>11/16/64</b>	HOURS TESTED <b>24</b>	CHOKE SIZE <b>17/64</b>	PROD'N. FOR TEST PERIOD <b>271</b>	OIL—BBL. <b>162E</b>	GAS—MCF. <b>47</b>	GAS-OIL RATIO <b>600E</b>	
FLOW. TUBING PRESS. <b>500</b>	CASING PRESSURE <b>800</b>	CALCULATED 24-HOUR RATE <b>271</b>	OIL—BBL. <b>162E</b>	GAS—MCF. <b>47</b>	OIL GRAVITY-API (CORR.) <b>37°</b>		
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) <b>Fuel for treator</b>						TEST WITNESSED BY <b>Ben Stevens</b>	
35. LIST OF ATTACHMENTS							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records <b>Zoller &amp; Danneberg AGENT-Kimbark Exploration Co.</b>							
SIGNED <b>[Signature]</b>				TITLE <b>Pres.</b>		DATE <b>Mar. 30, 1965</b>	

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement". Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement". Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Lower Ismay	5537		<p>Drilled 11" porous Limestone</p> <p>DST #1 5537-5553 Open 45" GTS IMMED. OTS 32". Clean oil 35". Pulled pipe. 2nd sound 2040' fluid-Reversed out-had 120' oil and 30' wtr. above reverse sub.-180' below sub.</p> <p>ISIP 1 hr. 2206#</p> <p>FSIP 1 hr. 2176#</p> <p>FP 623-1247#</p> <p>BHT 136°</p> <p>Water-90,000 PPM</p>	<p>Chinle</p> <p>Shinarump</p> <p>Moenkopi</p> <p>DeChelly</p> <p>Organ Rock</p> <p>Hermosa</p> <p>Upper Ismay</p> <p>Lower Ismay</p> <p>TD</p>	<p>1520</p> <p>2422</p> <p>2596</p> <p>2718</p> <p>2810</p> <p>4538</p> <p>5434</p> <p>5537</p> <p>5547</p>	Same

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION  
348 EAST SOUTH TEMPLE  
SUITE 301  
SALT LAKE CITY, UTAH

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number: So. Ismay # 1  
Zoller & Danneberg  
Operator AGENT-Kimbark Exploration Co. Address 201 University Blvd. Phone DU 84021  
Denver, Colo.  
Contractor Arapahoe Drilling Co. Address Denver, Colo. Phone \_\_\_\_\_  
Location NE 1/4 NE 1/4 Sec. 5 T.41 N. R. 26 E. San Juan County, Utah.

Water Sands:

	<u>Depth</u>	<u>Volume</u>	<u>Quality</u>
	<u>From</u>	<u>Flow Rate or Head</u>	<u>Fresh or Salty</u>
1.	840 850	2" steam ✓	brackish ✓
2.			
3.			
4.			
5.			

(Continued on reverse side if necessary)

Formation Tops:

Remarks:

- NOTE: (a) Upon diminishing supply of forms, please inform the Commission  
(b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure. (See back of form)  
(c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN  
(Other instr  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-708	
2. NAME OF OPERATOR MONSANTO COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal	
3. ADDRESS OF OPERATOR 101 North Marienfeld, Midland, Texas 79701		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  NE/4 NE/4 Section 5		8. FARM OR LEASE NAME South Ismay	
14. PERMIT NO.		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, GF, etc.) 4799' KB		10. FIELD AND POOL, OR WILDCAT McElmo Mesa	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 5, T-41S, R-26E	
		12. COUNTY OR PARISH San Juan	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) Convert to Water Disposal <input checked="" type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Convert South Ismay #1 to a water disposal well through present perforations at 5540-45; 5486-93; 5497-5502.

Produced water will be disposed through 2 7/8" 6.5# J-55, EUE Tubing set at 5400' with a tension packer.

Application is being made for State approval and this work should be started in September, 1973.

18. I hereby certify that the foregoing is true and correct

SIGNED

E. M. Scholl

TITLE

District Engineer

DATE

8/20/73

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

# Monsanto

## MONSANTO POLYMERS & PETROCHEMICALS CO.

317 First Savings & Loan Building

101 North Marienfeld

Midland, Texas 79701

Phone: (915) 683-3306

August 20, 1973

The State of Utah  
Oil & Gas Conservation Commission  
1588 West North Temple  
Salt Lake City, Utah 84116

Attn: Mr. C. B. Feight  
Executive Director

RE: Application for Water Disposal  
Monsanto Company  
South Ismay No. 1  
NE/4 NE/4 Section 5, T-41S, R-26E  
McElmo Mesa Field  
San Juan County, Utah

Gentlemen:

Monsanto Company respectfully requests approval to dispose of water into the Ismay Interval of South Ismay No. 1 in McElmo Mesa Field, San Juan County, Utah.

Produced water is presently being disposed into Monsanto Navajo A-3 under the provisions of the Commission's Order No. 125-1. Navajo A-1 is also a disposal well by Administrative approval. Water production now exceeds the capacity of Navajo A-3 and A-1 and it is necessary to convert South Ismay No. 1 to disposal service. South Ismay No. 1 was temporarily abandoned by Kimbark Operating Company. Monsanto Company is taking over operations of this well.

In compliance with Rule C-11 the following is submitted:

1. Attached is a plat showing the location of the proposed disposal well including all wells in the McElmo Mesa Area.
2. The names of lessees within one-half mile of the proposed disposal well are also attached.
3. It is proposed to inject water into the Ismay interval of the Paradox formation in the Hermosa Group located from 5476 to 5548 (T.D.), on the Neutron Log. Depths are measured from the rotary bushing elevation of 4799' above sea level. A copy of a portion of this log is attached. The Ismay interval is a vugular type limestone and dolomite rock.



Page 2  
The State of Utah  
August 20, 1973

4. A diagram of the casing is attached. Navajo A-1 was drilled in November, 1964 and completed with 5½" casing set with 100 sacks of cement and successfully pressure tested.
5. At the present time, it is proposed to inject about 400 barrels of water per day produced from wells in the McElmo Mesa Field. Maximum anticipated injection rate is 1500 barrels per day. From time to time it may be necessary to dispose of waters from present or future wells in the nearby area but not necessarily in the McElmo Mesa Field.
6. Attached is a certification that copies of this Application have been sent by registered mail to each lessee listed within one-half mile radius of the proposed injection well.

Monsanto Company respectfully submits this Application and hopes the Commission will administratively approve water disposal into South Ismay No. 1 under the provisions of Rule C-11 of the General Rules and Regulations.

The United States Geological Survey approval is also being sought for disposal into South Ismay No. 1 subject to like approval from the Oil and Gas Conservation Commission.

Yours very truly,

MONSANTO COMPANY



F. M. Scholl  
District Engineer

EMS:mm

Encls.

cc to: U.S.G.S.  
P.O. Box 959  
Farmington, New Mexico 87401

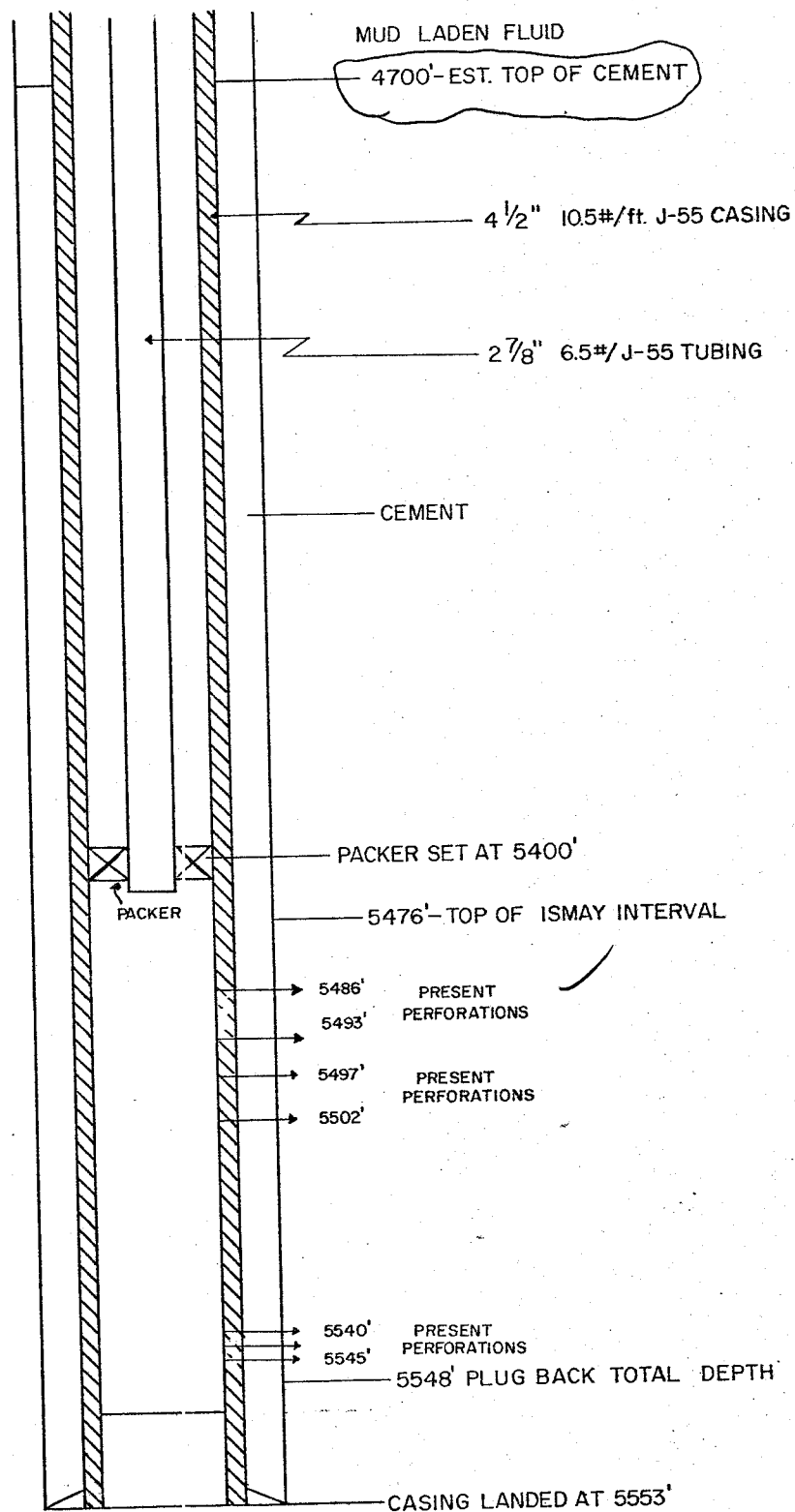
# EXHIBIT 4

## CASING DIAGRAM

MONSANTO CO. - So. ISMAY No. 1

MC ELMO MESA FIELD

San Juan County, Utah



NO SCALE

CERTIFICATION

I certify that on August 20, 1973, copies of Monsanto Company's Application for water disposal into South Ismay No. 1, McElmo Mesa Field, San Juan County, Utah, were sent by registered mail to the following lessees:

---

Texaco, Inc.	P.O. Box 2100 Denver, Colo. 80201
Amoco Production Co.	Security Life Bldg. Denver, Colo. 80202
Doyle H. Baird	Writers Center II, Suite 110 1805 South Bellaire Denver, Colo. 80222
Warrior Oil Company	Suite 801, 1776 Lincoln Street Denver, Colo. 80203
Zoller & Danneberg	1600 Broadway - Suite 1360 Denver, Colo. 80202
C. Crady Davis	1038 Guaranty Bank Bldg. Denver, Colo. 80202
The Kimbark Company	288 Clayton Street Denver, Colo. 80206

  
\_\_\_\_\_  
E. M. Scholl

State of Texas     )  
                              )  
County of Midland )

The foregoing instrument was acknowledged before me this 20th day of August 1973, by E. M. Scholl.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: June, 1975

# Monsanto

---

MONSANTO POLYMERS & PETROCHEMICALS CO.

317 First Savings & Loan Building

101 North Marienfeld

Midland, Texas 79701

Phone: (915) 683-3306

August 20, 1973

U.S. Geological Survey  
P.O. Box 959  
Farmington, New Mexico 87401

Attn: Mr. P. T. McGrath

RE: Navajo Tribal Lease #14-20-603-708  
South Ismay No. 1  
NE NE Section 5, T-41S, R-26E  
McElmo Mesa Field  
San Juan County, Utah

Gentlemen:

Monsanto Company respectfully requests U.S.G.S. and Navajo Tribe approval to convert South Ismay No. 1 to a salt water disposal well in the Ismay formation.

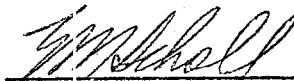
The well has been temporarily abandoned by Kimbark Operating Company.

The present disposal system for McElmo Mesa consists of Navajo A-1 and A-3 and is at capacity. It is necessary to obtain excess capacity by converting South Ismay No. 1 to disposal service.

We are also applying to the State for their administrative approval.

Yours very truly,

MONSANTO COMPANY



E. M. Scholl

District Engineer

EMS:mm

cc to: Utah Oil & Gas Conservation Commission  
1588 West North Temple  
Salt Lake City, Utah 84116  
Attn: C. B. Feight

# Monsanto

MONSANTO POLYMERS & PETROCHEMICALS CO.  
317 First Savings & Loan Building  
101 North Marienfeld  
Midland, Texas 79701  
Phone: (915) 683-3306

August 20, 1973

The State of Utah  
Oil & Gas Conservation Commission  
1588 West North Temple  
Salt Lake City, Utah 84116

Attn: Mr. C. B. Feight  
Executive Director

RE: Application for Water Disposal  
Monsanto Company  
South Ismay No. 1  
NE/4 NE/4 Section 5, T-41S, R-26E  
McElmo Mesa Field  
San Juan County, Utah

Gentlemen:

Monsanto Company respectfully requests approval to dispose of water into the Ismay Interval of South Ismay No. 1 in McElmo Mesa Field, San Juan County, Utah.

Produced water is presently being disposed into Monsanto Navajo A-3 under the provisions of the Commission's Order No. 125-1. Navajo A-1 is also a disposal well by Administrative approval. Water production now exceeds the capacity of Navajo A-3 and A-1 and it is necessary to convert South Ismay No. 1 to disposal service. South Ismay No. 1 was temporarily abandoned by Kimbark Operating Company. Monsanto Company is taking over operations of this well.

In compliance with Rule C-11 the following is submitted:

1. Attached is a plat showing the location of the proposed disposal well including all wells in the McElmo Mesa Area.
2. The names of lessees within one-half mile of the proposed disposal well are also attached.
3. It is proposed to inject water into the Ismay interval of the Paradox formation in the Hermosa Group located from 5476 to 5548 (T.D.), on the Neutron Log. Depths are measured from the rotary bushing elevation of 4799' above sea level. A copy of a portion of this log is attached. The Ismay interval is a vugular type limestone and dolomite rock.

Page 2  
The State of Utah  
August 20, 1973

4. A diagram of the casing is attached. Navajo A-1 was drilled in November, 1964 and completed with 5½" casing set with 100 sacks of cement and successfully pressure tested.
5. At the present time, it is proposed to inject about 400 barrels of water per day produced from wells in the McElmo Mesa Field. Maximum anticipated injection rate is 1500 barrels per day. From time to time it may be necessary to dispose of waters from present or future wells in the nearby area but not necessarily in the McElmo Mesa Field.
6. Attached is a certification that copies of this Application have been sent by registered mail to each lessee listed within one-half mile radius of the proposed injection well.

Monsanto Company respectfully submits this Application and hopes the Commission will administratively approve water disposal into South Ismay No. 1 under the provisions of Rule C-11 of the General Rules and Regulations.

The United States Geological Survey approval is also being sought for disposal into South Ismay No. 1 subject to like approval from the Oil and Gas Conservation Commission.

Yours very truly,

MONSANTO COMPANY



E. M. Scholl  
District Engineer

EMS:mm

Encls.

cc to: U.S.G.S.  
P.O. Box 959  
Farmington, New Mexico 87401

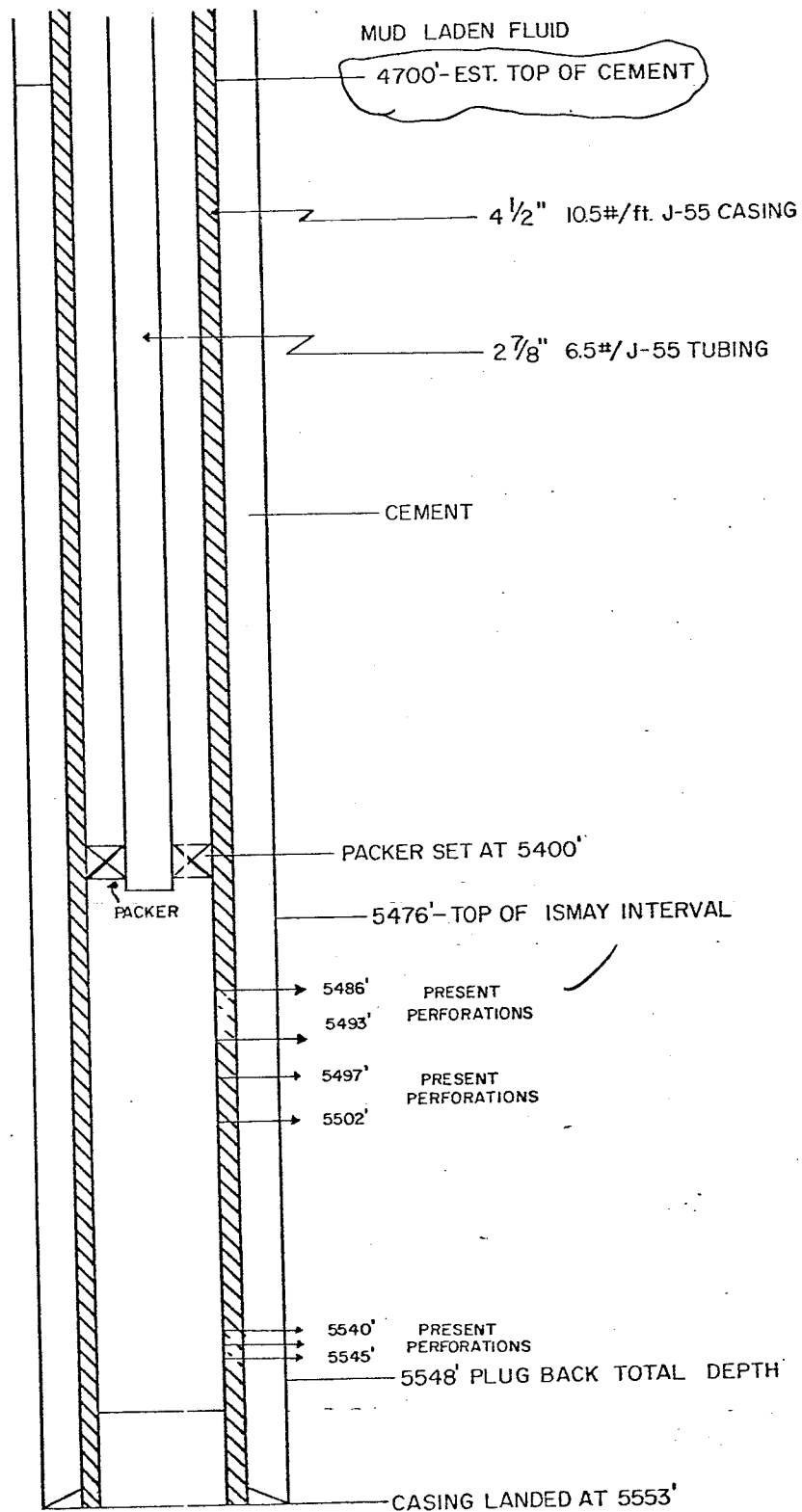
## EXHIBIT 4

## CASING DIAGRAM

MONSANTO CO. - So. ISMAY No. 1

MC ELMO MESA FIELD

San Juan County, Utah



NO SCALE

EXHIBIT 3

MONSANTO CO. So. ISMAY No.1

Portion of Neutron Log

Proposed Disposal Well

MC ELMO MESA FIELD

San Juan County Utah

5400

5486-93

5500

5497-5502

CORRECTED  
COLLARS

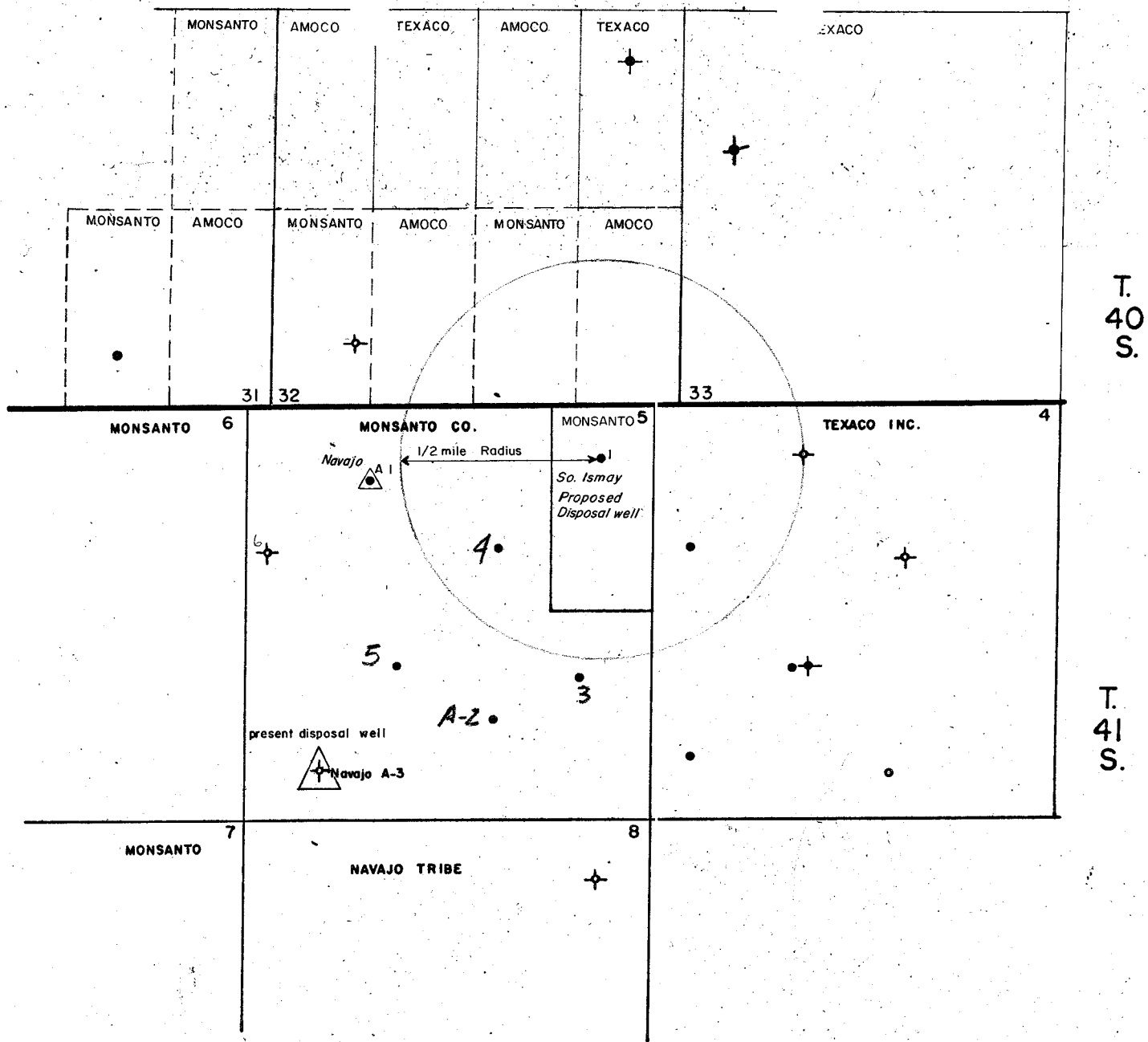
5540-45

RD 5547  
TD 5543

11  
5 1/2

2 IN CORRECTED  
COLLARS





## MC ELMO MESA FIELD

San Juan County, Utah

Scale : 1" = 2000'

### PROPOSED DISPOSAL WELL PLAT

EXHIBIT I

EXHIBIT 2

List of Lessee's within one-half mile radius of Monsanto Company  
South Ismay No. 1 Proposed Injection well

Texaco, Inc.

Amoco Production Co.

Doyle H. Baird

Warrior Oil Company

Zoller and Danneberg

C. Crady Davis

The Kimbark Operating Company

\*Kimbark Operating Company is not a lessee of record but does  
operate the interests owned by the Kimbark Company and its assigns.

300

EXHIBIT 3

MONSANTO CO. So. ISMAY No.1

Portion of Neutron Log

Proposed Disposal Well

MC ELMO MESA FIELD

San Juan County Utah

5400

5486-93

5500

5497-5502

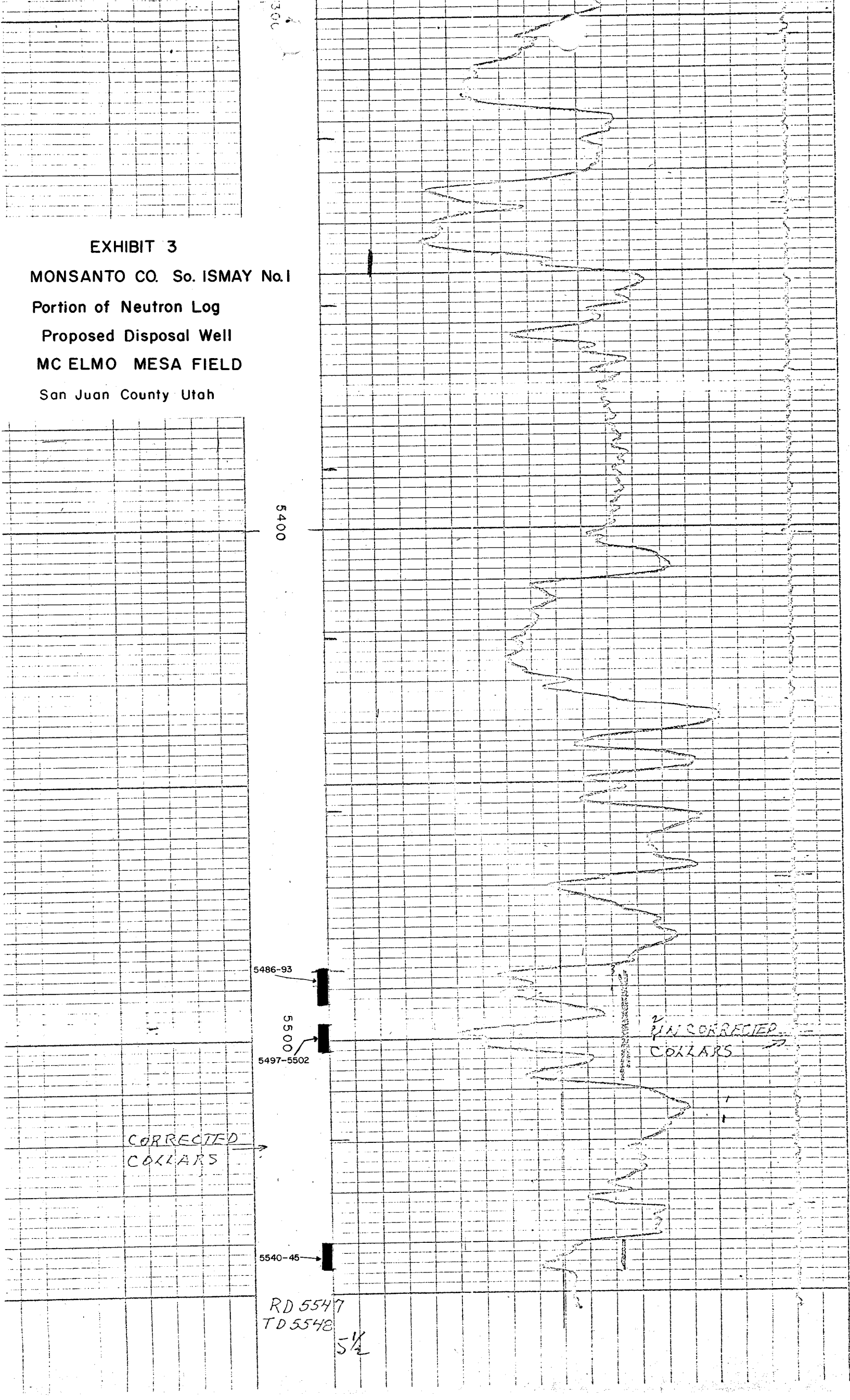
CORRECTED  
COLLARS

5540-45

RD 5547  
TD 5548

5 1/2

UNCORRECTED  
COLLARS



August 23, 1973

Monsanto Company  
101 North Marienfeld  
Midland, Texas 79701

Re: Application for Water Disposal  
South Ismay No. 1  
Sec. 5, T. 41 S, R. 26 E,  
San Juan County, Utah

Gentlemen:

Please be advised that insofar as this office is concerned,  
approval is hereby granted to utilize the above well for water disposal  
purposes.

Said approval given in accordance with the provisions of the  
Order issued in Cause No. 125-1.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FREIGHT  
DIRECTOR

CBF:sd

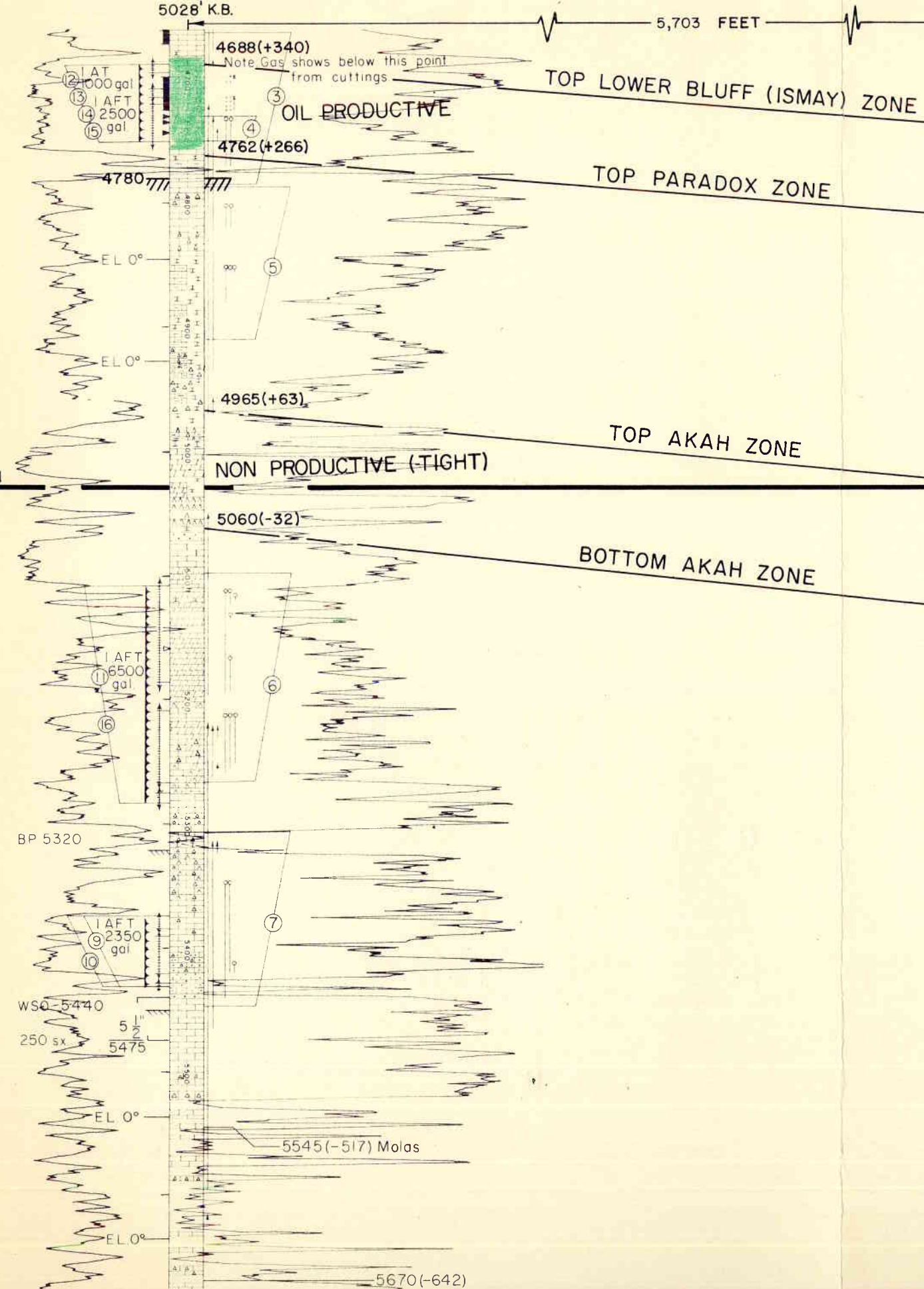
cc: U. S. Geological Survey

SHELL OIL COMPANY  
NORTH BOUNDARY BUTTE - 1  
5028' K.B.

5,703 FEET

③	DST	4662 4784	150 64	Gas to surface 4 min., rate 1160 MCF/D, plugged at surface after 17 min. Shut in, removed top joint, blew oil and gas 17 min. 630' (6.7 bbl.) 40° oil (cut 0.8-1.4% wax) 11-55
④	DST	4731 4749	84 60	Sour gas to surface 2 min., rate 450 MCF/D; oil to surface 10 min., ave. rate 913 B/D, cut 0.1-5.5%, 38° API 11-55
⑤	DST	4787 4910	273 20,70	Gas to surface 21 min., rate nil. 230' (1.3 bbl.) 30M 11-55
⑥	DST	5098 5265	150 20,70	Gas to surface 5 min., rate 115 MCF/D. 790' (7 bbl.) VGM & Oil (stem headed), 39° API wet. 11-55
⑦	DST	5307 5447	150 20,70	Gas to surface 25 min., rate nil. 290' (2.1 bbl.) VGM 11-55
⑧	DST	5807 5830	145 20,75	350' (4.7 bbl.) GWM, 270' (3.6 bbl.) GWM, 600' (5.6 bbl.) * 11-55
⑨	S	5374 5430	1 1/2 h	Failed, swabbing line parted. 11-55
	AFT	Treated 5374-5430 with 504 gallons regular acid, 924 gallons Jel X 500, 924 gallons regular acid.		
⑩	F	5374 5430	9 h 2 h	48 B/D gross, 98% cut + 400 MCF/D 5/8" 11-55
	AFT	Treated 5108-5282 with 500 gallons regular acid, 3,000 gallons Jel X 500, 3,000 gallons regular acid.		
⑪	F	5108 5282	20h 4 h	216 B/D gross, 6% cut + 480 MCF/D 5/8" 38° API 11-55
⑫	S	4688 4750	3 h	4 swab runs, recovered 1 bbl. oil on first run. 11-55
	AT	Treated 4688-4750 with 1,000 gallons regular acid.		
⑬	F	4688 4750	34h 5 h	216 B/D gross, 12% cut + 1420 MCF/D 40.5° API 11-55
	AFT 2	Treated 4688-4750 with 250 gallons Fix-a-frac, 500 gallons acid XF-32, 1,000 gallons Jel X 500, 1,000 gallons acid XF-32.		
⑭	F	4688 4750	25h	Final rate 312 B/D gross, 16% cut + 4700 MCF/D 11-55
⑮	F	4688 4750	10 1/2 h	Final rate 560 B/D gross, 23% cut, 9500 MCF/D (annulus). 11-55
	Produced zones 4688-4750 and 5108-5282 until cut stabilized.			
⑯	F	5108 5282	34 1/2 h 18 h	110 B/D gross, 19% cut + 1200 MCF/D 11-55

Sea Level





SHELL OIL COMPANY  
NORTH BOUNDARY BUTTE-43-28

4959' K.B.

ZONE

WSo  
4772'

4700(+259)  
4770(+189)

WATER  
BEARING

Sea Level

4980(-21)

OIL  
PRODUCTIVE

5080(-121)

PBTD 5527'

(Gamma Ray - Neutron Log  
after Plug Back).

Molas 5545 (-586)

5 1/2" LC  
5574 250

- 1 DST 3980 Missrun  
II-56 1166
- 1A DST 3979 95m 35' (0.28)M  
II-56 1166 500 ppm NaCl HP 2260, IFBHP/FFBHP 150/200  
500 ppm NaCl ISIBHP 140/20m, PSIBHP 250/45m 3/4" X 1"
- 2 DST 4681 152m 90' (1.13) 2VS100CM + 990' (14.03) GVS100CM + 2140' (28.28) S100CM + 30 MCF/D  
II-56 1760 573-3m 1650 ppm NaCl HP 3520, IFBHP/FFBHP 380/1100  
77,500 ppm NaCl ISIBHP 1560/21m, PSIBHP 1350/75m 1" X 1"
- 3 DST 4685 90m 10' (0.053) VS100CM  
II-56 1724 3000 ppm NaCl HP 2550, IFBHP/FFBHP 50/50  
2000 ppm NaCl ISIBHP not readable/20m, PSIBHP 120/45m 1" X 1"
- 4 DST 4780 120m 35' (0.173) GVS100CM  
II-56 1856 1900 ppm NaCl HP 2150, IFBHP/FFBHP 0/0  
1650 ppm NaCl ISIBHP 125/20m, PSIBHP 100/60m 3/4" X 1"
- 5 DST 4818 125m 30' (0.158) VS100CM  
II-56 1944 2640 ppm NaCl HP 2500, IFBHP/FFBHP 0/0  
2640 ppm NaCl ISIBHP 0/20m, PSIBHP Unable to shut in. + nil. MCF/D 3/4" X 1"
- 6 DST 4929 150m 50' (0.73) GS100CM + 590' (8.43) HG300CM + 250' (3.53) HG300 + 870' (10.48) MBG300  
II-56 5105 573-4m 2610 ppm NaCl HP 2720, IFBHP/FFBHP 720/950  
2640 ppm NaCl ISIBHP 2580/20m, PSIBHP 980/75m 33° API 3/4" X 1"
- 7 DST 5096 90m 60' (0.443) S100CM  
II-56 5283 1100 ppm NaCl HP 2645, IFBHP/FFBHP 0/20  
1100 ppm NaCl ISIBHP 0/20m, PSIBHP 190/45m 3/4" X 1"
- 8 DST 5270 120m 440' (3.28) WS100CM  
II-56 5444 1000 ppm NaCl HP 2400, IFBHP/FFBHP 180/350  
11,500 ppm NaCl ISIBHP 1850/21m, PSIBHP 1800/60m 3/4" X 1"
- 9 DST 5414 90m 185' (0.958) WCM + 90' (0.443) MCW  
II-56 5586 1810 ppm NaCl HP 2880, IFBHP/FFBHP 80/160  
16,800 ppm NaCl ISIBHP 1900/26m, PSIBHP 1700/45m 3/4" X 1"

Perforated a total of 39' with four 5/8" jet holes/foot in the following intervals:  
4990-5008, 5018-5024, 5028-5034, 5060-5064 and 5068-5073.

- 10 PT III-7-56 4990 Well swabbed off to 0 B/D in 8h  
5073 11h

Treated selected intervals in the gross interval 4990-5073 with 500 gals. acid (XF-32),  
1500 gals. acid petrofrac, 2500 gals. acid (XF-32), 1500 gals. acid petrofrac with 1000#  
sand.

- 11 PT III-8-56 4990 212.5 B/D + 65 MCF/D 291.5B 34° API  
5073 55 B/D + 65 MCF/D 3d

- 12 Completed on pump, representative initial rate not yet established.

INDEX MAP

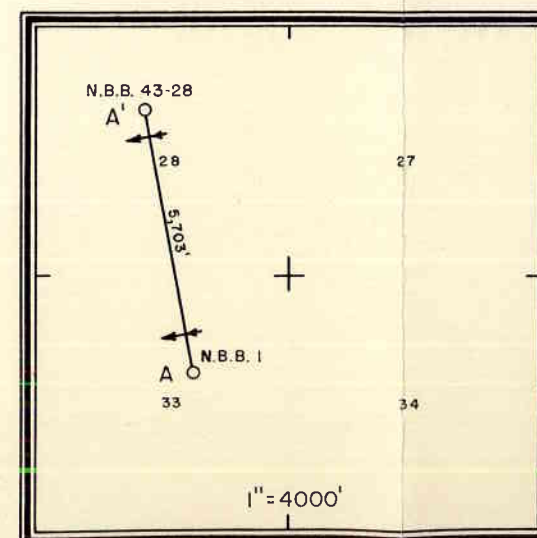


EXHIBIT IV

SHELL OIL COMPANY	PACIFIC COAST AREA FARMINGTON DIVISION	PRODUCTION DEPT.
----------------------	---	---------------------

CORRELATION SECTION  
NORTH BOUNDARY BUTTE  
DATUM: SEA LEVEL  
SAN JUAN COUNTY, UTAH  
VERTICAL SCALE: 1" = 100'

DATE NOV. 1960  
BY M.W. McGARRY  
APPROVED M.W.M.

K20-097

4

PMB

P. O. Drawer 1857  
Roswell, New Mexico 88201

September 13, 1973

8/27/73  
Monsanto Company  
317 First Saving & Loan Building  
101 No. Marlenfeld  
Midland, Texas 79701

Attention: E. M. Scholl, District Engineer

Gentlemen:

Your letter of August 20, 1973 requests approval to convert well No. 1 South Ismay, located in the NE<sup>1</sup>/<sub>4</sub> sec. 5, T. 41 S., R. 26 E., San Juan County, Utah, lease Navajo tribal 14-20-603-708, from a shut-in oil well to salt water disposal well in the Ismay zone in the McElmo Mesa field.

As set forth in your request, the existing two water disposal wells are not adequate to handle the produced waters from the field. Existing perforations would be utilized for injection below a packer set on tubing at 5400 feet.

Your request to utilize the well No. 5 for a disposal well for salt water from the McElmo field is hereby approved subject to like approval by the Utah Oil and Gas Conservation Commission. Any deviation from the proposal submitted should receive prior approval.

Sincerely yours,

CARL C. TRAYWICK  
Acting Area Oil & Gas Supervisor

cc:  
Utah Oil & Gas Conservation Commission  
Farmington

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING  
ROOM 4241 STATE OFFICE BUILDING  
SALT LAKE CITY, UTAH 84114  
(801) 533-5771  
(RULE I-5 & RULE I-4)

FORM NO. DOGM-UIC-1  
(Revised 1982)

RECEIVED  
OCT 17 1983  
437

IN THE MATTER OF THE APPLICATION OF

Monsanto Oil Company

CAUSE NO. \_\_\_\_\_

DIVISION OF  
OIL, GAS & MINING

ADDRESS Suite 600, 5613 DTC Parkway,  
Englewood, CO ZIP 80111  
INDIVIDUAL        PARTNERSHIP        CORPORATION X  
FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR  
INJECT FLUID INTO THE South Ismay #1 WELL  
SEC. 5 TWP. 41S RANGE 26E  
San Juan COUNTY, UTAH

ENHANCED RECOVERY INJ. WELL	<input type="checkbox"/>
DISPOSAL WELL	<input type="checkbox"/>
LP GAS STORAGE	<input type="checkbox"/>
EXISTING WELL (RULE I-4)	<input checked="" type="checkbox"/>

APPLICATION

Comes now the applicant and shows the Corporation Commission the following:

1. That Rule I-5 (g) (iv) authorizes administrative approval of enhanced recovery injections, disposal or LP Gas storage operations.
2. That the applicant submits the following information.

Lease Name <u>South Ismay</u>	Well No. <u>1</u>	Field <u>McElmo Mesa</u>	County <u>San Juan</u>
Location of Enhanced Recovery Injection or Disposal Well <u>NE, NE</u> Sec. <u>5</u> Twp. <u>41S</u> Rge. <u>26E</u>			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date <u>August 1973</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>2470</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		State What <u>Oil and Gas</u>
Location of Injection Source(s) <u>5486'-93', 5497'-5502', 5540'-45'</u>	Geologic Name(s) <u>Paradox-Hermosa</u> and Depth of Source(s) <u>5540'-45', 5497'-5502', 5486'-93'</u>		
Geologic Name of Injection Zone <u>Paradox (Ismay)</u>		Depth of Injection Interval <u>5486'</u> to <u>5493'</u>	
a. Top of the Perforated Interval: <u>5486'</u>	b. Base of Fresh Water: <u>2470</u>	c. Intervening Thickness (a minus b) <u>3016</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
Lithology of Intervening Zones <u>Sandstone, Carbonate</u>			
Injection Rates and Pressures Maximum <u>1000</u> B/D <u>1800</u> PSI			
The Names and Addresses of Those to Whom Notice of Application Should be Sent.			

State of Colorado

*K. J. Ebner*

Regional Production Mgr.

County of Arapahoe

K. J. Ebner

Applicant

Before me, the undersigned authority, on this day personally appeared K. J. Ebner  
known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on  
oath states that he is duly authorized to make the above report and that he has knowledge of the facts stated  
therein, and that said report is true and correct.

Subscribed and sworn to before me this 13th day of October, 19 83

SEAL

*Janice A. Smith*  
Janice A. Smith

My commission expires March 15, 1986

Notary Public in and for State of Colorado

(OVER)



## INSTRUCTIONS

1. Attach qualitative and quantitative analysis of representative sample of water to be injected and a qualitative and quantitative analysis of the injection formation of water.
2. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within one-half mile, together and with the name of the operator(s).
3. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division or appropriate government agencies.)
4. Attach Electric or Radioactivity Log of Subject well (if released).
5. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval.
6. If the application is for a NEW well the original and six (6) copies of the application and three (3) complete sets of attachments shall be mailed to the Division. For EXISTING well applications (Rule I-4) only ONE copy of the application and ONE complete set of attachments are required to be mailed to the Division.
7. The Division is required to send notice of application to the surface owner of the land within one-half mile of the injection well and to each operator of a producing leasehold within one-half mile of the injection well. List all required names and addresses in the appropriate space provided on the front of this form.
8. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county of publication before the application is approved. The notice shall include the name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application may be approved administratively.
9. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed by January 31st each year.
10. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
11. If there is less intervening thickness required by Rule I-5 (b) 4, attach sworn evidence and data.
12. For enhanced recovery projects, information required by Rule I-4 which is common to more than one well, need be reported only once on the application.

## CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	13-3/8"	153'	150	Surface	Returns
Intermediate	8-5/8"	1422'	200	Surface	Returns
Production	5-1/2"	5553'	200	4700'	Estimation
Tubing	2-7/8"	5476	Name - Type - Depth of Tubing Packer Baker Loc-Set PSA 5470'		
Total Depth 5553'	Geologic Name - Inj. Zone Paradox-Ismay		Depth - Top of Inj. Interval 5486'		Depth - Base of Inj. Interval 5545'

## INVENTORY OF AUTHORIZED EXISTING ENHANCED RECOVERY WELLS

*K. J. Ebner* Regional Production Mgr.  
Signature of Duly Authorized Representative  
K. J. Ebner  
October 13, 1983  
Date

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

\* \* \* \* \*

Operator: Monson Well No. South Jersey # 1  
 County: San Juan T 41S R 26E Sec. 5 API# 43-039-16269  
 New Well ☐ Conversion ☐ Disposal Well ☒ Enhanced Recovery Well ☐

	<u>YES</u>	<u>NO</u>
UIC Forms Completed	<u>✓</u>	
Plat including Surface Owners, Leaseholders, and wells of available record	<u>✓</u>	
Schematic Diagram	<u>✓</u>	
Fracture Information		<u>✓</u>
Pressure and Rate Control	<u>✓</u>	
Adequate Geologic Information		<u>✓</u>
Fluid Source	<u>Paradox</u>	
Analysis of Injection Fluid	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	TDS <input type="checkbox"/>
Analysis of Water in Formation to be injected into	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	TDS <input type="checkbox"/>
Known USDW in area	<u>Narajo</u> Depth <u>2470</u>	
Number of wells in area of review	<u>3</u> Prod. <u>2</u> P&A <u>1</u>	
	Water <u>0</u> Inj. <u>0</u>	
Aquifer Exemption	Yes <input type="checkbox"/> NA <input checked="" type="checkbox"/>	
Mechanical Integrity Test	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
	Date <input type="checkbox"/> Type <input type="checkbox"/>	

Comments: TOC 4700

---



---

Reviewed by: [Signature]



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 18, 1984

Monsanto Oil Company  
5613 DIC Parkway, Suite 600  
Englewood, Colorado 80111

Gentlemen:

RE: McElmo Mesa Field Water Injection

With your permission, I would like to make arrangements to meet with a representative from your company to inspect and gauge the casing tubing annulus pressure on the following water injection wells located in Section 5, Township 41 South, Range 26 East, SLBM, San Juan County, Utah:

Navajo A-1 (NENW)  
Navajo A-3 (SWSW)  
~~South Tsmay #1 (NENE)~~

Please have your representative contact me by phone: (801) 533-5771.

Thank you,

C.B. Feight  
UIC Manager

CBF/mfp  
030

*Copy of original*

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
4241 State Office Building  
Salt Lake City, Utah 84114

WELL INTEGRITY REPORT

\*\*\*\*\*

DATE: 5/8/85 COMPANY/OPERATOR Monsanto  
Water Disposal Well X Enhanced Recovery Well \_\_\_\_\_ Other \_\_\_\_\_  
API Well Number 43-037-16269 Field Name \_\_\_\_\_  
SEC. 5 TOWNSHIP 41S RANGE 26E WELL NAME/NUMBER South Tsmay #1  
Lease Name/Number 14-20-603-708 Location NE 1/4 of NE 1/4 COUNTY: San Juan

\*\*\*\*\*

INITIAL CONDITIONS:

Tubing ~~Long string~~ Rate/Pressure: 0 bw/d 0 psi Not injecting  
~~Short string Rate/Pressure:~~ \_\_\_\_\_ bw/d \_\_\_\_\_ psi  
Csg-tbg Annulus Pressure: 0 psi

CONDITIONS DURING TEST:

Tubing ~~Long string~~ Pressure: 20 psi 12 Minutes Time: 12:53 to 1:22  
Short string Pressure \_\_\_\_\_ psi \_\_\_\_\_ Minutes  
Csg-tbg Annulus Pressure 300 psi  
Amount of water added to annulus: 10 bbls

AFTER ANNULUS BLEED OFF:

Tubing ~~Long string~~ Pressure: 0 psi  
~~Short string Pressure:~~ \_\_\_\_\_ psi  
Csg-tbg Annulus Pressure: 0 psi

REMARKS: Injection facility pump being repaired at time of test. CTA held at 300 psi  
but had slight pressure build up in tubing. At 1:22 PM bled off 50 psi from CTA  
Tubing pressure dropped to 4 psi. Have small leak in either packer or tubing.  
Operator will be allowed to inject into this well until either the Navajo A-1  
or A-3 is repaired.

Howard Jones  
Operator Representative (Name)

C.B. Feight  
UIC FIELD INSPECTOR (Witness)

UIC FIELD INSPECTOR (Witness)

UTAH DIVISION OF OIL, GAS AND MINING  
CASING-BRADENHEAD TEST

OPERATOR: Monsanto Company

FIELD: McElmo Mesa LEASE: NW. 14-20-603-708

WELL # South Ismay 1 NENE SEC. 5 TOWNSHIP 41S RANGE 26E

STATE FED. FEE DEPTH 5553 TYPE WELL WIW MAX. INJ. PRESS. 3000

TEST DATE 10/23/84

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>	<u>13 3/8"</u>	<u>153</u>	<u>150 sx</u>			
<u>INTERMEDIATE</u>	<u>8 5/8"</u>	<u>1422</u>	<u>100 sx</u>		<u>Bradenhead not dug out</u>	
<u>PRODUCTION</u>	<u>5 1/2"</u>	<u>5552</u>	<u>100 sx</u>	<u>0 psi</u>	<u>CTA blew down in 3 sec-no liquids</u>	
<u>TUBING</u>	<u>2 7/8"</u>	<u>5400</u>	<u>Pack</u>		<u>Injection pressure at pump 50 psi</u>	

REMARKS:

Injection pressure should be much higher - will recheck

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUB. IN TRIPLICATE\*  
(Other instructions on  
reverse side)

### SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

<b>1. OIL WELL</b> <input type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> Water Disposal Well		<b>5. LEASE DESIGNATION AND SERIAL NO.</b> 21-000708
<b>2. NAME OF OPERATOR</b> BHP Petroleum Company Inc.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b> Navajo
<b>3. ADDRESS OF OPERATOR</b> 5613 DTC Parkway, Suite 600, Englewood, CO 80111		<b>7. UNIT AGREEMENT NAME</b> 
<b>4. LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  Sec. 5-T41S-R26E		<b>8. FARM OR LEASE NAME</b> South Ismay
<b>14. PERMIT NO.</b> 4303716269		<b>9. WELL NO.</b> 1
<b>15. ELEVATIONS</b> (Show whether DF, RT, OR, etc.)		<b>10. FIELD AND POOL, OR WILDCAT</b> McElmo Mesa
		<b>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b> 5-41S-26E
		<b>12. COUNTY OR PARISH</b> San Juan
		<b>13. STATE</b> Utah

RECEIVED  
JUN 02 1986

DIVISION OF  
OIL, GAS & MINING

**16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>	FRACTURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>	(Other) Name Change of Operator	<input checked="" type="checkbox"/>
(Other)	<input type="checkbox"/>			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

**17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Monsanto Oil Company acquired by BHP Petroleum Company Inc.

**18. I hereby certify that the foregoing is true and correct**

SIGNED <u>Bernard A. Wirth</u>	TITLE <u>Regional Land Manager</u>	DATE <u>May 30, 1986</u>
(This space for Federal or State office use)		
APPROVED BY _____	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		

NOTICE OF TRANSFER OF OWNERSHIP

Present operator: BHP Petroleum(Americas)Inc. Telephone: 303-850-9090

Address: 5613 DTC Parkway Suite 600

City: Englewood State: Co. Zip: 80111

Well no.: 1,3,4,5 (South Ismay Lease) Field or Unit name: McElmo Mesa

Sec.: 5 Twp.: 41S Rng.: 26E County: San Juan Lease no. 14-20-603-0708

Effective date of transfer: 7/20/87

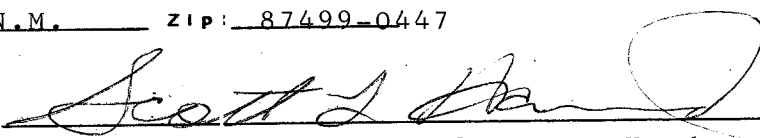
  
Signature of present operator

9/3/87  
Date

New operator: Cross Creek Corporation

Address: P.O. Box 447, 607 S. Miller Ave.

City: Farmington State: N.M. Zip: 87499-0447

  
Signature of new operator Scott L. Hand

8/24/87  
Date

(This space for DOGM approval)

The approval of this transfer is subject to the bonding requirements of Rule R615-3-1 of the Oil and Gas Conservation General Rules.

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 9/8/87  
BY: ALH

Approved by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_



STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Stock Tank Vapor Test		5. LEASE DESIGNATION & SERIAL NO. 14-20-603-708
2. NAME OF OPERATOR Cross Creek Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo
3. ADDRESS OF OPERATOR P.O. Box 1957, Duncan, Ok. 73534-1957		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Resort location clearly and in accordance with any State requirements.) Cross Creek Corp.		8. FARM OR LEASE NAME South Ismay
9. WELL NO.		10. FIELD AND POOL, OR WILDCAT McElmo Mesa
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 5, 41s, 26e		12. COUNTY San Juan
13. STATE UT.		

43-037-20072 South Ismay #3 - PW

43-037-20134 South Ismay #5 - SCW

43-037-20087 South Ismay #4 - SCW

43-037-16269 South Ismay #1 - WIW

43-037-20117 Navajo A-1 - WDW

43-037-20164 Navajo A-3 - WIW

(F. GR., etc.)

re of Notice, Report or Other Data

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other: Stock Test Vapor Test)	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

DATE OF COMPLETION 12-17-90

all pertinent details, and give pertinent dates, including estimated date of locations and measured and true vertical depths for all markers and zones

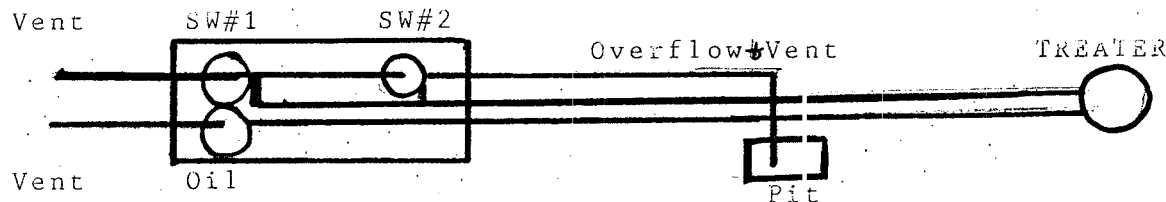
pertinent to this work.)

\* Must be accompanied by a cement verification report.

Kiva Measuring, Inc.  
49 Road 5500  
Bloomfield, N.M. 6322762

Gastec Precision Gas Protector System  
Gas Analysis H2S  
Extra Low Range 10 to 120 PPM

Produced Water Tank #2 21 PPM  
Produced Water Tank #1 13 PPM  
Produced Oil Tank 3 PPM



18. I hereby certify that the foregoing is true and correct

SIGNED Dorinda Hand

TITLE Clerk

DATE 12-19-90

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

See Instructions On Reverse Side

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

### SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

<b>1. OIL WELL</b> <input type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <u>Water Disposal Well</u>		<b>5. LEASE DESIGNATION &amp; SERIAL NO.</b> <u>14-20-603-708</u>	
<b>2. NAME OF OPERATOR</b> <u>Cross Creek Corporation</u>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b> <u>Navajo Tribal</u>	
<b>3. ADDRESS OF OPERATOR</b> <u>P.O. Box 1957 Duncan, Ok. 73534</u>		<b>7. UNIT AGREEMENT NAME</b> 	
<b>4. LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface <u>660' s/n 660' w/e</u> At proposed prod. zone		<b>8. FARM OR LEASE NAME</b> <u>South Ismay</u>	
<b>14. API NO.</b> <u>4303716269</u>		<b>9. WELL NO.</b> <u>#1</u>	
<b>15. ELEVATIONS</b> (Show whether DF, RT, GR, etc.)		<b>10. FIELD AND POOL, OR WILDCAT</b> <u>McElmo Mesa</u>	
<b>12. COUNTY</b> <u>San Juan</u>		<b>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b> <u>NENE 5.41S.26E</u>	
<b>13. STATE</b> <u>Ut</u>		<b>16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data</b>	

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☒(Other) Pressure TestPULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL ☒ALTERING CASING ☐ABANDONMENT\* ☐APPROX. DATE WORK WILL START 3/8/91DATE OF COMPLETION 3/9/91

- 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

2/26 Notice was given by phone.

3/8 Pulled tubing. Replaced packer and various joints of tubing. Reset packer and pressured back side with packer fluid to 750 pounds, Held for over thirty minutes. Test ok.  
& 3/9/91 Back in operation.

RECEIVED

MAR 14 1991

DIVISION OF  
OIL GAS & MINING

- 18. I hereby certify that the foregoing is true and correct**

SIGNED Darma HandTITLE ClerkDATE 3/12/91

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)		5. LEASE DESIGNATION & SERIAL NO. 14-20-603-708	
1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> <b>Annual Report of Shutin Wells</b>		6. IF INDIAN ALLOTTEE OR TRIBE NAME Navajo Tribal	
2. NAME OF OPERATOR Cross Creek Corporation		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR P.O. Box 1957 Duncan, Ok. 73534		8. FARM OR LEASE NAME South Ismay/Navajo 'A'	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  At proposed prod. zone		9. WELL NO. #1	
14. API NO. 43-037-16269		10. FIELD AND POOL, OR WILDCAT McElmo Mesa	
15. ELEVATIONS (Show whether DF, RT, GR, etc.)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 5,418,26E	
12. COUNTY San Juan		13. STATE Ut	

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
(Other) _____		DATE OF COMPLETION _____	
Annual Report of Shutin Wells			
APPROX. DATE WORK WILL START _____			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

A proposal plan for repair will be submitted for approval to all agencies by March 1, 1992.

RECEIVED

JAN 21 1992

DIVISION OF  
OIL GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED <u>Norma Hand</u>	TITLE <u>Clerk</u>	DATE <u>1-16-92</u>
(This space for Federal or State office use)		
APPROVED BY _____	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		

See Instructions On Reverse Side

PHONE CONVERSATION DOCUMENTATION FORM

☒ This is the original form ☐ or a copy ☐

☒ Route this form to:

☐ WELL FILE \_\_\_\_\_

☐ SUSPENSE

☒ OTHER

Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_

Return date \_\_\_\_\_

OPERATOR FILE

To: initials \_\_\_\_\_

CC: JRB

API number \_\_\_\_\_

Date of phone call: 2-2-00

Time: 10:47 AM

DOGM employee (name) KRISTEN RISBECK

Initiated call? ☐

Spoke with:

Name BERTHA SPENCER

Initiated call? ☐

of (company/organization) BIA/WINDOW ROCK AZ

Phone no. (520)871-5938

Topic of conversation: 1420603708 LEASE; WHO IS THE OPERATOR OF THE LEASE?

Highlights of conversation: PER MS. SPENCER OF THE BIA, THE TRIBE DENIED KRYSTAL ENERGY FROM TAKING OVER THE LEASE. CROSS CREEK IS NO LONGER THE OPERATOR DUE TO NOT INCREASING THEIR BOND PER THE BIA.

THE OPERATOR (CURRENT LESSEE) RECOGNIZED BY THE BIA IS AMOCO PRODUCTION COMPANY. AMOCO IS NOW RESPONSIBLE FOR THE ABOVE LEASE.

MS. SPENCER INFORMED ME THAT AMOCO IS PLANNING ON PLUGGING THE WELLS. I REQUESTED SOME FORM OF DOCUMENTATION REGARDING THE INFORMATION; SHE WILL FAX A LETTER SHE SENT TO KRYSTAL ENERGY (SEE ATTACHED)

## AUTOMATIC TELEFAX

DATE: February 3, 2000

LOCATION: BUREAU OF INDIAN AFFAIRS  
Navajo Area Office (Mail Code: 543)  
Window Rock, Arizona 86515

INFORMATION OR ASSISTANCE NO.: (520) 871-5938

NUMBER OF DOCUMENTS (Including cover sheet): 2

TO THE ATTENTION OF: Kirsten Risbeck - Utah Oil & Gas Mining

Office Phone Number: (801) 538-5281

TELEFAX NO.: (801) 359-3940

FROM: Bertha Spencer, Realty Specialist - Minerals & Mining Section

Office Phone Number: (520) 871-5938

Telefax Number: (520) 871-5943

MESSAGE OR INSTRUCTIONS: Attached is a copy of the letter that went to Krystal Energy. If you have any questions, you can call me at the above number.

FAXED BY: Bertha Spencer TIME: 11:00 hr

XXXXXXXXXXXXX  
NAVAJO REGION  
P. O. BOX 1060  
Gallup, New Mexico 87305-1060

RRES/543

DEC 08 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bruce Nicholson  
Krystal Energy  
P.O. Box 3897  
Window Rock, Arizona 86515

Dear Mr. Nicholson:

We are returning the proposed Assignment of Mining Lease for Navajo Tribal Oil and Gas Lease No. 14-20-603-708 between Amoco Production Company and Krystal Energy, Inc. and the proposed Assignment of Oil and Gas Lease Operating Rights between Cross Creek Corporation and Krystal Energy, Inc., without action.

By letter dated October 20, 1999 from the Navajo Nation Minerals Department, we have been advised not to process the above proposed assignments for approval at this time because Krystal Energy is currently not eligible to obtain a lease under the Navajo Nation law and due to other concerns of the Navajo Nation.

Therefore, upon receipt of this notice, you are directed to immediately cease all operation on the above lease. By a copy of this letter, the current lessee, Amoco Production Company, is instructed to immediately take over operation of the subject lease.

If you have any questions, please contact Ms. Bertha Spencer, Realty Specialist at (520) 871-5938 or Bimal Shrestha of Navajo Nation Minerals Department office at (520) 871-6587

Sincerely,

GENNI DENETSONE

Regional Director

Enclosures

cc: Amoco Production Company, POB 800, Denver, CO. 80222 - CERTIFIED MAIL  
Navajo Nation Minerals Department  
Bureau of Land Management, Attn: Steve Mason, Farmington Field Office  
Linda Taylor, SH/RES

Reverse  
stick the gummed strip to the back of the envelope at a post office service



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FED  
3/3/2000

43-037-16269

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

March 3, 2000

Ms. Bertha Spencer  
Bureau of Indian Affairs  
Navajo Area Office (Mail Code: 543)  
Window Rock, Arizona 86515

Re: Oil & Gas Operations on Lease No. 14-20-603-708

Dear Ms. Spencer:

It was recently brought to my attention that the B.I.A. has returned, without action, a proposed Assignment of Mining Lease for the above referenced Navajo Tribal Oil and Gas Lease between Amoco Production Company and Krystal Energy, Inc., along with a proposed Assignment of Oil and Gas Lease Operating Rights between Cross Creek Corporation and Krystal Energy, Inc. The Bureau has also instructed Amoco, as current lessee, to immediately take over operation of the lease.

The Division of Oil, Gas and Mining intends to contact Amoco to request that they commence submitting various production and status reports for wells located on this lease. Our files, however, do not contain any documentation regarding lease assignments, or of Amoco's involvement with this lease. I am therefore writing to request, if possible, that copies be sent to the Division of any B.I.A. records pertaining to the following matters:

1. Documents that identify Amoco as the current lessee;
2. Documents that show which wells Amoco is responsible for (our records indicate that there are three oil wells and three water disposal wells located in this lease area);
3. Any monthly production and injection reports pertaining to the wells in this lease that are in your possession or readily available to you for the reporting periods of April 1999 to present.

Page 2  
Ms. Bertha Spencer  
Lease No. 14-20-603-708  
March 3, 2000

Your assistance in obtaining copies of these records will be greatly appreciated. If there are costs or complications pertaining to this request, please feel free to contact me at 801-538-5275, or by email at [dstaley@state.ut.us](mailto:dstaley@state.ut.us). Thank you very much.

Sincerely,

A handwritten signature in black ink that reads "Don Staley". The signature is fluid and cursive, with a long horizontal line extending from the "D" across the top of the name.

Don Staley  
Information Services Manager  
Oil and Gas

cc: J.R. Baza  
K.D. Risbeck  
Well Files:

South Ismay 1 (API 43-037-16269) 5-41S-26E  
South Ismay 3 (API 43-037-20072) 5-41S-26E  
South Ismay 4 (API 43-037-20087) 5-41S-26E  
South Ismay 5 (API 43-037-20134) 5-41S-26E  
Navajo A-1 (API 43-037-20117) 5-41S-26E  
Navajo A-3 (API 43-037-20164) 5-41S-26E



Division of Oil, Gas and Mining  
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☒ Well File \_\_\_\_\_  
\_\_\_\_\_  
(Loc.) Sec \_\_\_\_\_ Twp \_\_\_\_\_ Rng. \_\_\_\_\_  
(API No.) \_\_\_\_\_

☐ Suspense  
(Return Date) \_\_\_\_\_  
(To-Initials) \_\_\_\_\_

☒ Other  
South Ismay 1  
Nevejo A-1  
Nevejo A-3  
Inj. Files  
Compliance File (Resolved 2403)

1. Date of Phone Call: 1-30-03 Time: 10:00

2. DOGM Employee (name) L. Cordova (☒ Initiated Call)  
Talked to:  
Name Lee Askelson (☐ Initiated Call) - Phone No. (415) 972-3541  
of (Company/Organization) EPA (SF)

3. Topic of Conversation: missing injection volumes & annual reports.  
(Operatorship, Cross Creek Resources or Krystal Energy?)

4. Highlights of Conversation: \_\_\_\_\_  
Lease 14-20-603-708 (Leasee Amoco Prod. Co.)  
No injection for April-Dec. 1999  
No injection for Jan-Dec. 2000  
Wells PA'd by Amoco 10/2000 & 9/2000. (No PA info. available)  
Steve Mason (BLM - Farmington NM) 505-599-6364  
No injection info. for above months.  
Will fax PA info. 2-4-2003 (Rec'd 24-03 see well files)  
BLM awaiting surface restoration.  
Cross Creek Res. was the designated operator, Krystal Energy  
never approved as operator. (Amoco Prod. Co. - Leasee)

Form 3160-5  
(June 1990)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

## SUBMIT IN TRIPLICATE

1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other WATER INJECTION

2. Name of Operator  
AMOCO PRODUCTION COMPANY ATTN: MELISSA VELASCO-PRICE

3. Address and Telephone No.  
P.O. BOX 3092 HOUSTON TX 77253 (218) 366-2548

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
660' FNL, 660' FEL SECTION 5, T-41S, R-26E

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5. Lease Designation and Serial No.

14-20-603-708

6. If Indian, Allottee or Tribe Name

NAVAJO TRIBAL

7. If Unit or CA, Agreement Designation

8. Well Name and No.

SOUTH ISMAY #1

9. API Well No.

43-037-16269

10. Field and Pool, or Exploratory Area

McELMO MESA

11. County or Parish, State

SAN JUAN, UTAH

## 12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

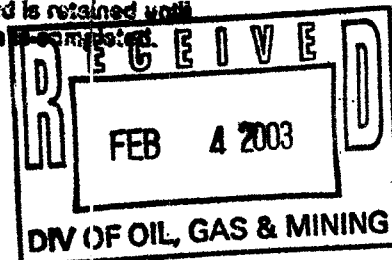
13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

BP AMOCO PLUGGED AND ABANDONED THE ABOVE WELL WITH THE PROCEDURES APPROVED ON 4-13-98.

SEE ATTACHED REPORT FOR DETAILED INFORMATION.

Approved as to plugging of the well bore.  
Liability under bond is retained until  
surface restoration is completed.ENTERED  
AFMSS

2000

BY sm200 OCT 13 PM 2:47  
OFO, FARMINGTON, NM

14. I hereby certify that the foregoing is true and correct.

Signed

Melissa Velasco Price

Title

Permitting Asst

Date

10-10-00

(This space for Federal or State office use)

Approved by

Conditions of approval, if any:

Title

EXEMPTED FOR RECORD

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FARMINGTON COPY

## P&A OPERATION CEMENT SERVICE REPORT

**WELL NAME:** SOUTH ISMAY #1

**DATE STARTED:** 09-21-00

**DATE COMPLETED:** 10-03-00

**TOTAL PLUGS SET:** 8

**TOTAL SACKS USED:** 352 SX

**BLM WITNESS:** M. KECMAN

**OPERATOR WITNESS:** R. CANDELARIA

MOL AND RU RIG. ND WELLHEAD AND NU BOP. POH AND LD 193 JTS (5108.79') 2 7/8" TBG. RIH WITH GAUGE RING AND TAGGED AT 5125'. POH. PU AND STRAP IN HOLE WITH 2 3/8" TBG AND TAGGED FILL AT 5229'.

**PLUG #1 (ISMAY, 4960' - 5229'),** CIRCULATED HOLE CLEAN WITH WATER. BALANCED 17 SX INSIDE CSG. PUH AND WOC. RIH AND TAGGED TOC AT 5203'. BLM CHANGE IN PROCEDURE. TOPPED OFF PLUG WITH 52 SX + 2% CaCl. POH AND WOC. RIH TAGGED TOC AT 4960'.

**PLUG #2 (HERMOSA, 4077' - 4590'),** RIH AND PERFORATED SQUEEZE HOLES AT 4590'. POH. PU AND RIH WITH RETAINER AND SET AT 4558'. ESTABLISHED INJECTION RATE AT 0 BPM WITH 2000 PSI. PRESSURE LEAKED OFF SLOWLY. STUNG OUT AND SPOTTED 65 SX CL. B CEMENT TO END OF TBG. STUNG INTO RETAINER AND SQUEEZED 10 SX BELOW RETAINER TO 2000 PSI. STUNG OUT AND BALANCED 55 SX ON TOP OF RETAINER. POH AND WOC. RIH AND TAGGED TOC @ 3956'.

**PLUG #3 (DECHELLY, 2457' - 2720'),** RIH AND PERFORATED SQUEEZE HOLES AT 2720'. POH. PU AND RIH WITH RETAINER AND SET AT 2684'. ESTABLISHED INJECTION RATE AT 0 BPM WITH 1800 PSI AND SLOW LEAK OFF. MIXED 56 SX CL. B CEMENT PLACING 26 SX ABOVE AND 30 SX BELOW RETAINER, SQUEEZING PERFORATIONS TO 1600 PSI. POH.

**PLUG #4 (CHINLE, 1498' - 1570'),** RIH AND PERFORATED SQUEEZE HOLES AT 1571'. POH. PU AND RIH WITH RETAINER AND SET AT 1525'. ESTABLISHED INJECTION RATE AT 0 BPM WITH 1800 PSI. BLM CHANGE IN PROCEDURE. MIXED 45 SX, PLACING 28 SX ABOVE AND 17 SX BELOW RETAINER. SQUEEZING PERFORATIONS TO 1900 PSI, 8 5/8" SHOE NOT COVERED. PUH TO 1498' AND REVERSE 25 SX OUT TO MAKE TOC AT 1498', CASING COMMUNICATED THROUGH THE 8 5/8" AND 13 3/8" ANNULAS. POH. RIH AND TAGGED TOP OF RETAINER AT 1571'. EPA CHANGE IN PROCEDURES. (CHINLE, 1460' - 1565'), PUH AND PERFORATED SQUEEZE HOLES AT 1565'. POH. PU AND RIH WITH RETAINER AND SET AT 1525'. ESTABLISHED INJECTION RATE AT 0 BPM WITH 1800 PSI AND SLOW LEAK OFF. MIXED 28 SX CL. B CEMENT, PLACING 21 SX BELOW AND 7 SX ABOVE RETAINER AND SQUEEZING PERFORATIONS TO 1600 PSI. POH.

**PLUG #5 (8 5/8" SHOE, 1322' - 1430'),** EPA CHANGE IN PROCEDURES. RIH AND PERFORATED SQUEEZE HOLES AT 1430'. POH. PU AND RIH WITH RETAINER AND SET AT 1377'. ESTABLISHED INJECTION RATE INTO PERFORATIONS WITH WATER AT 0 BPM WITH 2000 PSI AND SLOW LEAK OFF. MIXED 25 SX CL. B CEMENT, PLACING 3 SX BELOW AND 22 SX ABOVE RETAINER, SQUEEZING PERFORATIONS TO 1900 PSI. POH. RIH WITH WIRELINE AND TAGGED TOC AT 1144'.

**PLUG #6 (SURFACE, 0' - 210'),** PUH AND PERFORATED SQUEEZE HOLES AT 210'. PU AND RIH WITH RETAINER AND SET AT 147'. CIRCULATED 5 1/4" CLEAN WITH WATER. CLOSED CSG VALVE AND CIRCULATED 8 5/8"x5 1/2" ANN. CLEAN WITH WATER. CLOSED 8 5/8" VALVE AND ATTEMPTED TO CIRCULATE 13 3/8" ANN. BUT COMMUNICATED OUT OF CSG FLANGE. MIXED 64 SX CL. B CEMENT, PLACING 40 SX BELOW TO CIRCULATE GOOD CEMENT TO SURFACE OUT THE 8 5/8" CSG AND 24 SX ABOVE RETAINER TO CIRCULATE GOOD CEMENT TO SURFACE INSIDE THE 5 1/2" CSG. DUG CELLAR AND CUT OFF WELLHEAD, CEMENT AT SURFACE. RD RIG AND INSTALLED DRY HOLE MARKER.

NATHAN E. CRAWFORD.  
P&A SUPERVISOR